## **A-GENERAL**

Document Convention	A-2
Drives	A-3
Shortcuts	A-3
Project Folders	A-3
Naming Convention	A-4
County Abbreviation Naming Convention	A-9
MicroStation Print Organizer	A-10
MicroStation Print – Roll Plotting	A-11
MicroStation Symbology	Symb-1

A-1 Revised: 02/19/2020

#### **Document Convention**

#### **Typefaces**

**Bold** Can indicate several items. First a command name, parameter name,

or dialog box title. Command paths are shown using an arrow

between command names.

Example: Choose **File > Open** to load a new file.

Second, a system prompt or message, which requires an action be taken

by the user.

Example: Select first segment of alignment

ALL CAPS Used for project related variable in names of Files and Folders.

Example: minn1234.dgn would be shown as COUNPCN#.dgn

PCN# refers to the four-character designation for the PCN COUN refers to the four-character designation for the county

STA refers to station (expressed without +00)

ALIGN refers to alignment name

? Used in file name to indicate a variable.

r -Rural scale

s -Suburban scale

u -Urban scale

Example: t1234u.dgn would be shown as tPCN#?.dgn

XX Used in folder name to indicate different groups.

regionA Aberdeen Region
regionM Mitchell Region
regionP Pierre Region
regionRC Rapid City Region
rd Road Design
br Bridge Design

Example: RegionP would be shown as RegionXX or rd would be shown as XX.

A-2 Revised: 12/09/2016

#### **Drives**

All project related files will be worked on and stored on the server. The server is "\Espr1c6srv\dot" which is mapped as your U: . This drive could be referred to as the U: drive or server.

All configuration and other miscellaneous file for MicroStation and InRoads are stored on the local drive or C: .

#### **Shortcuts**

Since almost all files for each project are in the project folder you may what to create a shortcut to that folder.

#### **Shortcut to Folder**

- 1. Using Window Explorer browse to prj folder.
- 2. Right Click the project folder Select **Copy**.
- 3. Right Click on your Desktop Select **Paste shortcut**.

#### **Project Folders**

Project Folders will be broken up by regions and groups. Project Folders should always begin with COUN (the four-character abbreviation is found on sheet A-6) and end with PCN# (Project Control Number). Project Folders should always be a sub folder of the prj folder. Approval is required for additional folders other than those listed below.

Abandonment transfers will be stored in separate folders as a sub folder of Aban\_Trans. They will also be broken up by regions and groups, and will begin with COUN (the four-character abbreviation is found on sheet A-6) and end in PCN# (the PCN or assigned ID).

Note: If the project is in multiple counties, then use the county that is the farthest West or South. If the project is statewide then use SD. If the project is regionwide then use REG.

Note: If a set of plans will include multiple projects, a primary project should be selected for file storage. This primary project would be selected first by major work and if needed by the furthest west or south project, then highway classification (even over odd highway number if same classification).

Note: If a PCN does not exist for the work being done then store the files in Misc not prj or get a PCN assigned.

A-3 Revised: 12/09/2016

#### **Naming Convention**

Some of the standard naming conventions have been listed below. If you need to create a file that doesn't have an established name then create one that has some meaning. File names such as "junk", "bob", etc. are unacceptable. Refrain from spaces dashes in filenames.

Files containing information for the entire project shall include PCN# in the file name. Generally these files are a complete project layout and are to be a State Plane Coordinates.

1. **Survey:** The following files are available from survey in the region project folder:

(U:\regionXX\prj\COUNPCN#) (These files are read only in the Central Office)

Name	Created By:	Description
PCN#org.dtm	Field Office	Original Ground Surface
PCN#org.alg	Field Office	Original Survey Geometry
PCN#lt.alg	Road Design	Add'l Land Tie Geometry (only if surveyed separately)
tPCN#?.dgn	Field Office	Topography (Graphics)
PCN#lt.dgn	Road Design	Add'l Land Ties (Graphics) (only if surveyed separately)

2. Road Design: The following files are available from road design project folder: (U:\rd\prj\COUNPCN#)

All files from other offices will be referenced or opened from their appropriate folder. All efforts should be made to not copy files from other office's folders.

MicroStation Files: (U:\rd\prj\COUNPCN#)

Type	Name	Logical	Description
Subsurface Files	uPCN#?.dgn	u	Subsurface Utilities Project Layout
ROW Files	rPCN#.dgn	r	ROW Project Layout
	stripmap.dgn		Strip Map for Project
	mosaic.dgn		Project Mosaic
Drafter Files	dPCN#?.dgn	d	Drafting Project Layout
	cgPCN#.dgn	cg	Curb and Gutter Project Layout
	fPCN#.dgn	cg f	Traffic Project Layout
Engineer Files	ePCN#.dgn	e	Designer Project Layout
	xPCN#.dgn	X	Cross Sections
	pPCN#.dgn	р	Pipe Cross Sections
	prPCN#.dgn		Pavement Removal Project Layout
	gPCN#.dgn	g	Erosion Control Project Layout
	yPCN#.dgn		Traffic Designer Project Layout
	stakePCN#.dgn		Layout used for Construction Staking
	sPCN#.dgn		Storm Sewer Project Layout
	grPCN#.dgn		Guardrail Project Layout
	cPCN#.dgn	c	Contours and Triangles Project Layout
Plan Sheets	title.dgn		Title Sheet
	title?.dgn		Cover Sheet for Section (b-z)
	NotesSection?.dgn		Note Sheet(s) for Section (b-z)
	NotesNonSection.dgn		Note Sheet(s) for NonSection method
	TableConduit.dgn		Table of Conduit Quantities Sheet(s)
	WiringTables.dgn		Signal Wiring Tables
	TableFence.dgn		Table of Fence Quantities Sheet(s)
	TablePipe.dgn		Table of Pipe Quantities Sheet(s)
	TableCG.dgn		Table of Curb & Gutter Quantities Sheet(s)
	DataControl.dgn		Control Data Sheets(s)
	DataHoriz.dgn		Horizontal Alignments Data Sheets(s)
	DataSubSurface.dgn		SubSurface Data Sheet(s)
	typ.dgn		Typical Sheet(s)
	Legend.dgn		Section B Legend Sheet
	STA.dgn		Plan /Profile Sheets (Beginning Station)
	STAv.dgn		Profile Sheet (Beginning Station)

A-4 Revised: 02/19/2020

MicroStation Files: (U:\rd\prj\COUNPCN#) Continued

Туре	Name	Logical	Description
Plan Sheets	STAcg.dgn		Curb & Gutter Sheets (Beginning Station)
	STAcr.dgn		Curb Ramp Layout Sheets (Ramp Station)
	STAgr.dgn		Guard Rail Sheets (Beginning Station)
	STApr.dgn		Pavement Removal Sheets (Beginning Station)
	STAp#.dgn		Plats (Beginning Station)
	STAe#.dgn		Exhibits (Beginning Station)
	STArow.dgn		ROW Plan Sheets (Beginning Station)
	STAc.dgn		Conduit Sheets (Intersection Station)
	STAes.dgn		Existing Signal Sheets (Intersection Station)
	STAs.dgn		Signal Sheets (Intersection Station)
	STApm.dgn		Pavement Marking Sheets (Begin or Inter. Sta)
	STASTAr.dgn		Lighting Removal Sheets (Begin Sta-End Sta)
	STASTAw.dgn		Field Wiring Diagrams (Begin Sta-End Sta)
	STAtime.dgn		Signal Timing Diagram
	tsd.dgn		Time-Space Diagram
	STAss.dgn		Alternate - Storm Sewer Sheets (Begin Station)
	STArw.dgn		Alternate - ROW Layout Sheets (Begin Station)
	STAec.dgn		Erosion Control Sheets (Beginning Station)
	STAla.dgn		Landscape Sheets (Beginning Station)

Note: For Non-Mainline Sheets include Alignment Name(See Below) after STA.

**MicroStation Files:** From other Offices (U:\XX\prj\COUNPCN#)

Type	Name	Logical	Description
Survey Files	tPCN#?.dgn	t	Topography Project Layout
	PCN#lt.dgn	lt	Land Ties (only if surveyed separately)
Surfacing	jPCN#.dgn	j	Surfacing Joint Project Layout (XX refers to ms)
Bridge	bPCN#.dgn	b	Bridge Project Layout (XX refers to br)

Print Organizer Plot Sets: (U:\rd\prj\COUNPCN#)

	/
PCN#_Section?.pset	All MicroStation Sheets for the Section.
PCN#_NonSection.pset	All MicroStation Sheets
PCN# Plats.pset	All Plats for the Project.
PCN# ROWPlans.pset	All ROW Plan Sheets for Project
	-

A-5 Revised: 02/19/2020

InRoads Files: (U:\rd\prj\COUNPCN#)

Type	Name	Location
Project File	PCN#.rwk	(U:\rd\prj\COUNPCN#)
Geometry Files		
ROW	rPCN#.alg	(U:\rd\prj\COUNPCN#)
Drafter	dPCN#.alg	(U:\rd\prj\COUNPCN#)
Traffic Drafter	fPCN#.alg	(U:\rd\prj\COUNPCN#)
Engineer	ePCN#.alg	(U:\rd\prj\COUNPCN#)
Survey	PCN#org.alg	(U:\regionXX\prj\COUNPCN#)
	PCN#lt.alg	(U:\regionXX\prj\COUNPCN#)
Template Libraries		
Base	sddot.itl	(U:\rd\Bentley\V8i\InRoads\data\
		English)
Project	PCN#.itl	(U:\rd\prj\COUNPCN#)
Roadway Design File*	PCN#.ird	(U:\rd\prj\COUNPCN#)
Surfaces		
Original	PCN#org.dtm	(U:\regionXX\prj\COUNPCN#)
Design	ALIGN.dtm	(U:\rd\prj\COUNPCN#)
surface for Storm Sewer	storm.dtm	(U:\rd\prj\COUNPCN#)
surface for Select Topping	select.dtm	(U:\rd\prj\COUNPCN#)
Existing Subsuface Utilities	utilites.dtm	(U:\rd\prj\COUNPCN#)
Strom and Sanitary Drainage file	PCN#.sdb	(U:\rd\prj\COUNPCN#)
Preference File	XX.xin	(C:\dot\XX\data)

<sup>\*</sup>Note: For Corridor Name use Alignment Name.

#### **Alignment Names:**

ment Names:	
mainline	construction center line
US##	Intersecting Highway - number proceeded by SD or US (EX. SD45)
xrSTA	minor cross roads - mainline station of intersection (EX. xr445 for cross
	road at 445+21)
frSTA	frontage roads - beginning station which matched mainline stationing.
	(EX. fr445 for frontage road starting at 445+21)
detSTA	detour - mainline station of intersection
divSTA	diversion - mainline station of intersection
drSTA	drainage alignment - mainline station of intersection
rampA	ramp naming convention – see Road Design Manual Chapter 13 –
	Interchanges (pg 13-8 to 13-10)labeling alphabetically starting in NE quad
EB	divided highways with two mainlines (EX. SB for southbound)
b#	section lines, quarter lines, sixteen lines, property lines, etc.
e#	existing row line
ec#	existing center line
A#	proposed row lines
te#	temporary easements
area#	Areas for ROW
T#	Ties for areas

#### **Deliverable Files:** (U:\rd\prj\COUNPCN#)\*

PCN#_Plats.pdf	All sheets for plats
PCN#_ROWPlans.pdf	All sheets for ROW plans
PCN#_Section?.pdf	All sheets for section.
PCN#_NonSection.pdf	All sheets for Non-section method.
PCN#_Section?Add#.pdf	Sheets revised for Addendum
PCN#_Section?CCO#.pdf	Sheets revised for CCO
PCN#_Specifications.pdf	All specification sheets (For Utility project only).
PCN_ChecklistForm.docx	Special Provision Checklist

<sup>\*</sup> PDFs that are not Deliverables are stored in the Documents subfolder (if useful to others).

A-6 Revised: 04/08/2019

**Adobe Acrobat Files:** (U:\rd\prj\COUNPCN#\documents) – most used as reference to create sheets.

dobe recobat thes. (e. halpf) (e. or in (documents) most used at	reference to create sheets.
Checklistgrading.pdf	Check list for grading.
Checklisttraffic.pdf	Check list for traffic.
Section_A-EstimateofQuantitiesandEnvironmentalCommitments.pdf	All Notes for Section A
Section_B-Grading_Notes.pdf	All Notes for Section B
Section_D-Erosion_Control_Notes.pdf	All Notes for Section D
Section_H-Landscaping_Notes.pdf	All Notes for Section H
Section_L-Lighting_and_Signals_Notes.pdf	All Notes for Section L
Section_M-Pavement_Marking_Notes.pdf	All Notes for Section M
NonSection_Notes.pdf	All Notes for Non-section
Control_Data.pdf	All Control Data
Horizontal_Alignment.pdf	All Horiz. AlignmentsData
Subsurface_Utility_Locations.pdf	All SubSurface Location Data
Table_of_Fence_Quantities.pdf	All Fence Quantities
Table_of_Pipe_Quantities.pdf	All Pipe Quantities
Table_of_Conduit_Quantities.pdf	All Conduit Quantities
Table_of_Pavement_CG_Sidewalk_Quantities.pdf	All Curb & Gutter Quantities
StripMap.pdf	Strip Map for Project
WiringTables.pdf	Signal Wiring Tables

#### Other Files:

dier rues:	
ewPCN#.xls	Earthwork Computation Worksheets for Project.
Section_A-EstimateofQuantitiesand	Section A Notes for Project.
EnvironmentalCommitments.docx	
Section_B-Grading_Notes.docx	Section B Notes for Project.
Section_D-Erosion_Control_Notes.docx	Section D Notes for Project.
Section_H-Landscaping_Notes.docx	Section H Notes for Project.
Section_L-Lighting_and_Signals_Notes.docx	Section L Notes for Project.
Section_M-Pavement_Marking_Notes.docx	Section M Notes for Project.
NonSection_Notes.docx	Notes for Project NonSection Method.
Control_Data.docx	Control Data for Project.
Horizontal_Alignment.docx	Horizontal Alignment Data for Project.
Subsurface_Utility_Locations.docx	SubSurface Utility Locations Data for Project.
Table_of_Fence_Quantities.xlsx	Table of Fence Quantities for Project.
Table_of_Pipe_Quantities.xlsx	Table of Pipe Quantities for Project.
Table_of_Conduit_Quantities.xlsx	Table of Conduit Quantities for Project.
Table_of_Pavement_CG_Sidewalk_Quantities.xls	Table of Curb and Gutter Quantities for Project.
WiringTables.xlsx	Signal Wiring Tables for Project.
STArow?.tif	Aerial Photos for ROW Sheet.
DTMNAME_Bluetop.txt	Blue top report for DTM
DTMNAME_Slopestake.txt	Slope stake notes for DTM
mosaicUS##.tif	Aerial Photos for mosaic with Highway suffix -
	number proceeded by SD or US (EX. SD45)

A-7 Revised: 08/22/2017

XML Staking Files: U:\rd\prj\COUNPCN#\Staking

PCN#_OriginalDTM.xml	LandXML file containing Original surface data.
PCN#_MainlineALG.xml PCN#_MainlineDTM.xml PCN#_MainlineTriangles.dgn PCN#_MainlineTriangles.dwg	LandXML file containing Mainline alignment data LandXML file containing Mainline surface data. Triangles for Mainline surface (MicroStation Format). Triangles for Mainline surface (AutoCAD Format).
PCN#_ALIGNALG.xml PCN#_ALIGNDTM.xml PCN#_ALIGNTriangles.dgn PCN#_ALIGNTriangles.dwg	LandXML file containing ALIGN alignment data. LandXML file containing ALIGN surface data. Triangles for ALIGN surface (MicroStation Format). Triangles for ALIGN surface (AutoCAD Format).

Note: See Alignment Names above for ALIGN

Other Folders:(U:\rd\prj\COUNPCN#)

Documents	Contains documents for the Project.
Drainage*	Contains all drainage related files for the Project.
Consultant Files	Folder for subfolders of consultant files not in Section B.
Section?	Subfolder for Section (EX. SectionC) (Except Section?.pdf)
	For the Project Design Consultant Files Only
Email*	For E-Mail relating to the Project.
Images	Folder for subfolders of pictures/videos for Project.
Month Day, Year*	Subfolder name-( EX. October 28, 1999)
LandownerMeeting	Contains all files related to Landowner Meetings for the Project.
Other Agencies*	Folder for subfolders for files received from other agencies. Create a
	subfolder for each agency.
Accident Reports*	Other Agencies subfolder for Accident Reports related to the Project
PublicMeeting	Contains files related to Public Meeting for the Project.
Noise	Contains all files for Project Noise Study
Review	Contains plan review comments for the Project.
Staking	Contains all files for Staking Information for Project.
Scope Options*	Contains all files for Corridor Scope Design Options.
Temp*	Contains all temporary files for Project. Folder will be deleted when
	archived.
Utilities*	Contains all files for Utility Coordination.
Traf*	Contains all files for Signal Timing and Progression and Lighting.

<sup>\*</sup> Additional subfolders acceptable

**Note:** If other folders are needed please work with your supervisor before creating new folders.

A-8 Revised: 02/08/2021

# **County Abbreviation Naming Convention**

Aurora         auro         3         2         14         South           Beadle         bead         5         3         14         North           Bennett         benn         7         4         14         South           Bon Homme         bonh         9         5         14         South           Brookings         brok         11         6         14         North           Brown         brwn         13         7         14         North           Brown         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         North           Clark         clrk         25         13         14         North           Clay         27         14         14         South           Codington         codn         29         15         14         North	County	Abbr	FIPS	DOT	UTM	SPC
Beadle         bead         5         3         14         North           Bennett         benn         7         4         14         South           Bon Homme         bonh         9         5         14         South           Brookings         brok         11         6         14         North           Brown         brwn         13         7         14         North           Brown         brwn         15         8         14         South           Bule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butfelo         bute         19         10         13         North           Campbell         camb         21         11         14         North           Campbell         camb         21         11         14         North           Clark         clrk         25         13         14         North           Clark         clrk         25         13         14         North           Codington         codn         29         15         14			Code	Code	Zone	Zone
Bennett         benn         7         4         14         South           Bon Homme         bonh         9         5         14         South           Brookings         brok         11         6         14         North           Brown         brwn         13         7         14         North           Brule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Charles Mix         cmix         23         12         14         North           Clark         clrk         25         13         14         North           Clark         clrk         25         13         14         North           Codington         codn         29         15         14         North           Custer         cust         33         17         13<	Aurora	auro	3	2	14	South
Bon Homme         bonh         9         5         14         South           Brookings         brok         11         6         14         North           Brown         brwn         13         7         14         North           Brule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Charles Mix         cmix         23         12         14         North           Clark         clr         25         13         14         North           Clark         clr         25         13         14         North           Colory         clay         27         14         14         South           Corson         cors         31         16         14         North           Davison         davs         35         18         14 <td>Beadle</td> <td>bead</td> <td>5</td> <td>3</td> <td>14</td> <td>North</td>	Beadle	bead	5	3	14	North
Brookings         brok         11         6         14         North           Brown         brwn         13         7         14         North           Brule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         Clrk         25         13         14         North           Clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Day         day         37         19         14         North           Dewel         duel         39         20         14         North     <	Bennett	benn	7	4	14	South
Brown         brwn         13         7         14         North           Brule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clark         clay         27         14         14         South           Clark         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Day         day         37         19         14         North           Deuel         duel         39         20         14	Bon Homme	bonh	9	5	14	South
Brule         brul         15         8         14         South           Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Dewel         duel         39         20         14         North           Dewey         dewy         41         21         14	Brookings	brok	11	6	14	North
Buffalo         buff         17         9         14         South           Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Edmunds         edms         45         23         14	Brown	brwn	13	7	14	North
Butte         bute         19         10         13         North           Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13	Brule	brul	15	8	14	South
Campbell         camb         21         11         14         North           Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South </td <td>Buffalo</td> <td>buff</td> <td>17</td> <td>9</td> <td>14</td> <td>South</td>	Buffalo	buff	17	9	14	South
Charles Mix         cmix         23         12         14         South           Clark         clrk         25         13         14         North           Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14	Butte	bute	19	10	13	North
Clark         Clrk         25         13         14         North           Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Gregory         greg         53         27         14	Campbell	camb	21	11	14	North
Clay         clay         27         14         14         South           Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14	Charles Mix	cmix	23	12	14	South
Codington         codn         29         15         14         North           Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         North           Hand         hand         59         30         14	Clark	clrk	25	13	14	North
Corson         cors         31         16         14         North           Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Greant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14	Clay	clay	27	14	14	South
Custer         cust         33         17         13         South           Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         63         32         13	Codington	codn	29	15	14	North
Davison         davs         35         18         14         South           Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Handing         hard         63         32         13	Corson	cors	31	16	14	North
Day         day         37         19         14         North           Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hand         hand         63         32         13         North           Hughes         hugh         65         33         14 <t< td=""><td>Custer</td><td>cust</td><td>33</td><td>17</td><td>13</td><td>South</td></t<>	Custer	cust	33	17	13	South
Deuel         duel         39         20         14         North           Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Davison	davs	35	18	14	South
Dewey         dewy         41         21         14         North           Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Day	day	37	19	14	North
Douglas         doug         43         22         14         South           Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Deuel	duel	39	20	14	North
Edmunds         edms         45         23         14         North           Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Dewey	dewy	41	21	14	North
Fall River         friv         47         24         13         South           Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Douglas	doug	43	22	14	South
Faulk         falk         49         25         14         North           Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Edmunds	edms	45	23	14	North
Grant         grnt         51         26         14         North           Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Fall River	friv	47	24	13	South
Gregory         greg         53         27         14         South           Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Faulk	falk	49	25	14	North
Haakon         hakn         55         28         14         South           Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Grant	grnt	51	26	14	North
Hamlin         haml         57         29         14         North           Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Gregory	greg	53	27	14	South
Hand         hand         59         30         14         North           Hanson         hans         61         31         14         South           Harding         hard         63         32         13         North           Hughes         hugh         65         33         14         South	Haakon	hakn	55	28	14	South
Hansonhans613114SouthHardinghard633213NorthHugheshugh653314South	Hamlin	haml	57	29	14	North
Hardinghard633213NorthHugheshugh653314South	Hand	hand	59	30	14	North
Hughes hugh 65 33 14 South	Hanson	hans	61	31	14	South
	Harding	hard	63	32	13	North
Hutchinson huch 67 34 14 South	Hughes	hugh	65	33	14	South
	Hutchinson	huch	67	34	14	South

County	Abbr	FIPS	DOT	UTM	SPC
		Code	Code	Zone	Zone
Hyde	hyde	69	35	14	North
Jackson	jack	71	36	14	South
Jerauld	jrld	73	37	14	South
Jones	jons	75	38	14	South
Kingsbury	king	77	39	14	North
Lake	lake	79	40	14	South
Lawrence	lawr	81	41	13	North
Lincoln	linc	83	42	14	South
Lyman	lymn	85	43	14	South
McCook	mcck	87	44	14	South
McPherson	mcph	89	45	14	North
Marshall	mrsh	91	46	14	North
Meade	mead	93/993	47	13	North
Mellette	mell	95	48	14	South
Miner	minr	97	49	14	South
Minnehaha	minn	99	50	14	South
Oglala Lakota	ogla		57	13	South
Moody	mody	101	51	14	South
Pennington	penn	103/903	52	13	South
Perkins	perk	105	53	13	North
Potter	pott	107	54	14	North
Roberts	robt	109	55	14	North
Sanborn	sanb	111	56	14	South
Shannon*	shan	113	57	13	South
Spink	spnk	115	58	14	North
Stanley	stan	117	59	14	South
Sully	suly	119	60	14	North
Todd	todd	121	61	14	South
Tripp	trip	123	62	14	South
Turner	turn	125	63	14	South
Union	unin	127	64	14	South
Walworth	wlth	129	65	14	North
Yankton	yank	135	68	14	South
Ziebach	zieb	137	69	14	North

\*Shannon County was renamed Oglala Lakota County in 2015

A-9 Revised: 12/09/2016

#### **MicroStation Print Organizer**

#### This documentation assumes:

- MicroStation V8i.
- Bentley Configuration Utility has been run.
- MicroStation is open.

#### File > Print Organizer

#### File > Add Files to Set...

Select Add

Add desired files.

(Alternatively, you can drag and drop design files into the Print Set hierarchical view from Windows Explorer.)

From Print definition creation options

Browse (Magnify Glass)
Select desired Print Style
OK

#### File > Print

Select the desired **Print Range.**Select the desired **Destination**. (Following documented naming convention) **OK** 

**Note:** An error message in the Message Center may indicate the PDF is read-only, or another user may have it open.

A-10 Revised: 12/09/2016

### <u>MicroStation Print - Roll Plotting</u>

#### This documentation assumes:

- MicroStation V8i.
- Bentley Configuration Utility has been run.
- MicroStation is open.

**Place a Fence** around the desired plot area.

#### File > Print

File > Select Bentley Driver
Select SDDOTpdf\_Roll.pltcfg
Open
Select the desired Scale

#### File > Print

Select the desired **Destination**. (Following documented naming convention) **OK** 

**Note:** An error message in the Message Center may indicate the PDF is read-only, or another user may have it open.

This creates a large format PDF. To produce a large format paper you will print this PDF to a Windows Printer capable of printing rolls.

A-11 Revised: 12/09/2016

# **MICROSTATION SYMBOLOGY**

ON BIMDOLOGI	
Curb and Gutter Project Layout	cgPCN#.dgn
Drafter Project Layout	dPCN#?.dgn
Plan Sheet	STA.dgn
Curb and Gutter Plan Sheet	STAcg.dgn
Erosion Control Plan Sheet	STAec.dgn
Title Sheet for Project	title.dgn
Section B Cover Sheet	titleb.dgn
Typical Section Sheets for Project	typ.dgn
Text sizes for plan sheets	
Contours & Triangles Project Layout	cPCN#.dgn
Engineer's Project Layout	ePCN#.dgn
Pavement Removal Project Layout	prPCN#.dgn
Pipe Sheets for Project	pPCN#.dgn
Cross Section Sheets for Project	xPCN#.dgn
ROW Project Layout	rPCN#.dgn
Plat	STAp.dgn
Exhibits	STAe.dgn
Topography Project Layout	tPCN#?.dgn
	_
Signal Wiring Diagram	STAw.dgn
Lighting Wiring Diagram	STASTAw.dgn
Conduit Sheet	STAc.dgn
Lighting Sheet	STASTAl.dgn
Pavement Marking Sheet	STApm.dgn
Existing Signal Sheet	STAes.dgn
Signal Sheet	STAs.dgn
	Curb and Gutter Project Layout Drafter Project Layout Plan Sheet Curb and Gutter Plan Sheet Erosion Control Plan Sheet Title Sheet for Project Section B Cover Sheet Typical Section Sheets for Project Text sizes for plan sheets  Contours & Triangles Project Layout Engineer's Project Layout Pavement Removal Project Layout Pipe Sheets for Project Cross Section Sheets for Project  ROW Project Layout Plat Exhibits  Topography Project Layout  Signal Wiring Diagram Lighting Wiring Diagram Conduit Sheet Lighting Sheet Pavement Marking Sheet Existing Signal Sheet

## All font is Arial size 18 =Rural, 9 = Suburban, 3.6 = Urban unless listed below.

AS = 1 200 Scale Rural (11 x 17 sheet) Description	Text-(Size)	Level	Color
Begin/End Notes	28/20	15	6
Subordinate, Exception, Structure Notes	25/20	15	6

AS = .5 100 Scale Suburban (11 x 17 sheet) Description	Text-(Size)	Level	Color
Begin/End Notes	14/10	15	6
Subordinate, Exception, Structure Notes	12.5/10	15	6

AS = .2 40 Scale Urban (11 x 17 sheet) Description	Text-(Size)	Level	Color
Begin/End Notes	5.6/4	15	6
Subordinate, Exception, Structure Notes	5/4	15	6

# Levels, Color, Weight & Style For Drawings

### ALL LINE STYLES ARE A STYLE OF 0 IF NOT SPECIFIED

cgPCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
¥				1	
MAINLINE HORIZONTAL ALIGNMENT	1	6	5	0	
MAINLINE HORIZONTAL STATIONING	2	6	2	0	
TYPE P GUTTER DRIVEWAY DIMENSIONS	9	2	1	0	
SHOULDER	16	2	1	0	
EDGE OF CONCRETE	17	0	1	0	
EDGE OF CONCRETE	17				
CURB & GUTTER	19	2	1	0	
SIDEWALK	19	2	1	0	
APPROACH PAVEMENT	19	2	1	0	
FILLETS	19	2	1	0	
PED POLE AND CLEAR SPACE	20	5	1	0	PED30/PED48
MOUNTABLE MEDIAN PAVEMENT	25				
ASPHALT AREAS	26				
SPECIAL TYPES OF PAVEMENT	27				
RETAINING WALLS	30	112	3	0	
BRIDGES OR BOX CULVERETS	30	77	Varies	0	
DRIDGES OR BOX CULVERETS	30	77	varies	U	
		!			
dPCN#r.dgn dPCN#s.dgn dPCN#u.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
MAINLINE HORIZONTAL ALIGNMENT	1	6	5	0	
MAINLINE HORIZONTAL STATIONING	2	6	2	0	
MAINLINE HORIZONTAL BEARINGS	4	6	2	0	
	10	6	2	0	
DETOUR ALIGNMENT	11	6	5	0	
DETOUR STATIONING	12	6	2	0	
EASEMENT SHAPE	13	3	1	0	
EASEMENT SHADING	13	9		Outline	
DETOUR BEARINGS	14	6	2	0	
	15				
EDGE OF SHOULDER LINES	16	2	1	0	
ENTRANCES	17	2	1	0	
AMEDING A DELYGYANA DAYA	10				D1010
VERTICAL BENCH MARKS	18	6	2	0	BMNOTE
VERTICAL ENTRANCE NOTES	19	2	2	0	

dPCN#r.dgn	dPCN#s.dgn	dPCN#u.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
VERTICAL ALIGN	IMENT		20	6	2	0	
VERTICAL SPECIA	AL DITCH GRADE (	(LEFT)	20	31	2	0	
VERTICAL SPECIA	AL DITCH GRADE	(RIGHT)	20	30	2	0	
VERTICAL ELEVA	ATIONS		21	6	2	0	
VERTICAL STATION	ONING		22	6	3	0	
VERTICAL SIDE E	LEVATIONS (LEFT	T/RIGHT)	10-R/23 L				
VERTICAL EARTH	HWORK NOTES & I	HAUL NOTES	23	10	2	0	
VERTICAL GRAD	ES		24	6	2	0	
VERTICAL CURV	E DATA		25	6	2	0	
VERTICAL SPECIA	AL DITCH GRADE	NOTES (LEFT)	25	31	2	0	
VERTICAL SPECIA	AL DITCH GRADE	NOTES (RIGHT)	25	30	2	0	
FENCE			26	5	1	0	
			27				
Environmental Sens	itive Site		28	10	1	0	
			29				
DRAINAGE ARRO	WS, DITCH BLOCK	S, DITCH BLOCK	30	77	Varies	0	
NOTES & FLOWL	NE ELEVATIONS						
PIPE, BOX CULVE	RTS & STRUCTUR	ES	30	77	8	0	
PERIMETER (WOF	RK LIMITS)		32	2	0	2	
BORROW PIT OR	OPTIONAL BORRO	W PIT	36	2	1	0	
			49				
PROFILE BORDER			50	3	2	0	
PROFILE GRID			51				
PROFILE GRID			52	0	0	1	

STA.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
ROW INFORMATION & SECTION, TOWNSHIP RANGE	20	50/6	Varies	Varies	
LANDOWNER NAMES & LEGAL DESCRIPTION	33	50	Varies	Varies	
CURVE DATA	34	6	2	0	
NORTH ARROW	35	25	3	0	
INSTALL NOTES	36	77	2	0	
RETAIN NOTES & ESS NOTES	36	10	2	0	
DO NOT DISTURB NOTES	36	2	2	0	
TAKE OUT NOTES	37	2	2	0	
EASEMENT NOTES & EASEMENT STATION OFFSETS	38	3	1 & ROW/2	0	
FENCE NOTES	39	5	2	0	
OBLITERATE NOTES	40	2	2	0	
ELIMINATE ENTRANCE NOTES	40	2	2	0	

STAcg.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
CURB AND GUTTER NOTES	20	10			
PLOT SHAPES	45	2	0	7	NAME

STAec.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
EROSION CONTROL DRAWINGS & NOTES	20				
PLOT SHAPE	45				
		'			
REVISION NOTES	59				

title.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
	1	1			
NORTH ARROW	2	25	0	0	NARROW
INDEX	11	10			
SECTIONS XX	12				
BEGIN AND END NOTES WITH LEADER & ARROW	15	6	Varies	0	
PCN#S	20	10	5	0	
GROSS LENGTH	20	10	2	0	
PROJECT,LEADER & ARROW	20	10	Varies	0	
PROJECT TITLE DESCRIPTIONS	20	0	1	0	
STATE OF SOUTH DAKOTA	20	0	0	0	
LEGEND	20	10	1	0	
LENGTH OF EXCEPTION	21	10	2	0	
DESIGN DESIGN.,STORM WATER PERMIT & SCALES	21	10	1	0	
INDEX OF SECTIONS	21	10	3	0	
INDEX OF SECTION NOTES	21	10	2	0	
ROW SCALES	22	3	1	0	
R.O.W. TITLE DESCRIPTIONS	22	3	5	0	
NOTES FOR ROW PLANS	22	3	5	0	
STATE MAP	38	10	1	6	
PLOT SHAPE	45	2	0	7	NAME
REVISION NOTE	59	10			

titleb.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
SECTION B TITLE	1	10	5	0	
NORTH ARROW	2	25	Varies	0	NARROW
BEGIN AND END NOTES WITH LEADER & ARROW	15	6	Varies	0	
INDEX OF SHEETS	21	10	3	0	
INDEX OF SHEETS CONTEXT	21	10	1	0	

typ.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
				T	T
ALL DRAWINGS	1	10	2	0	
DIMINSIONS	1	10	1	0	TX=18
PLOT SHAPES	45	2	0	7	NAME

# The Settings Set Refer to Text For Easements, Easement Notes & ROW Font=Arial

DESCRIPTION	SCALE	Color	HEIGHT	WEIGHT	SPACING						
DESCRIPTION	SCIEE	20101	11210111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Briterio						
RURAL	200	Varies	18	0	7						
For Rural Plan Sheets-Station & Offset	for Tempo	rary Easements an	d for Permaner	t R.O.W. USI	E						
Easement Station & Offset		3	15	0	7						
{Proposed} Permanent R.O.W.		10	15	0							
Easement Notes		3	18	0							
Labeling the Section - Township - Range		50	30	0							
Utilize text 18 & for the rest of the R.O.W. infor	Utilize text 18 & for the rest of the R.O.W. information with the exception to text for lots, blocks, etc. Check with the										
Existing	g ROW Spe	cialist on R.O.W.									
SUBURBAN	100	Varies	9	0	3.5						
For Suburban Plan Sheets-Station & Offs	set for Tem	porary Easements	and for Perman	ent R.O.W. U	SE						
Easement Station & Offset		3	7.5	0	3.5						
{Proposed} Permanent R.O.W.		10	7.5	0							
Easement Notes		3	9	0							
Labeling the Section - Township - Range		50	15	0							
Utilize text 9 for the rest of the R.O.W. informatio	n with the e	exception to text for	r lots, blocks, etc	c. Check with	the Existing						
RC	W Speciali	st on R.O.W.									
URBAN	40	Varies	3.6	0	1.5						
For Urban Plan Sheets-Station & Offse	t for Tempo	orary Easements ar	nd for Permaner	nt R.O.W. US	E						
Easement Station & Offset		3	3	0	1.5						
{Proposed} Permanent R.O.W.		10	3	0							
Easement Notes		3	3.6	0							
Labeling the Section - Township - Range		50	6	0							
Utilize text 3.6 for the rest of the R.O.W. inform	nation with	the exception to te	ext for lots, block	ks, etc. Check	with the						
Existing	g ROW Spe	cialist on R.O.W.									

cPCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
			T		
ORIGINAL CONTOURS - MAJOR		4	1	0	
ORIGINAL CONTOURS - MINOR	10	3	0	5	
SUBGRADE CONTOURS - MAJOR		4	1	0	
SUBGRADE CONTOURS - MINOR	11	3	0	5	
UNDERCUT CONTOURS - MAJOR		4	1	0	
UNDERCUT CONTOURS - MINOR	12	3	0	5	
FINISH GRADE CONTOURS - MAJOR		4	1	0	
FINISH GRADE CONTOURS - MINOR	13	3	0	5	
ORIGINAL TRIANGLES	20	2	0	0	
SUBGRADE TRIANGLES	21	3	0	0	
UNDERCUT TRIANGLES	22	4	0	0	
FINISH GRADE TRIANGLES	23	6	0	0	
THISTI GRADE TRAINGLES	20	<u> </u>	V	V	
PROFILE LINES	27				
DATUM LINES	28				
GRIDDED MODEL GRID - ORGINAL		2	0	0	
GRIDDED MODEL GRID - SUBGRADE		3	0	0	
GRIDDED MODEL GRID - UNDERCUT	29	4	0	0	
GRIDDED MODEL GRID - FINISH		6	0	0	
DEM DOINE EL EVACIONO DEM	1				
DTM POINT ELEVATIONS-DTM	22				
RANDOM SYMBOLS & CELLS	32				
DTM BREAKLINE SYMBOLS, CELLS & LINES	33				
DTM CONTOUR SYMBOLS, CELLS & LINES	34				
DTM INFERRED SYMBOLS, CELLS & LINES	35				
DTM INTERIOR SYMBOLS, CELLS & LINES	36				
DTM EXTERIOR SYMBOLS, CELLS & LINES	37				
COLOR-CIDED ELEVATIONS	44				
COLOR-CODED ELEVATIONS					
LEGEND & FRAME	45				
COLOR-CODED SLOPES	46				
COLOR CODED SLOPE	10				
LEGEND TEXT & FRAME	47				
			1		l
SLOPE VECTORS & DIRECTION	50				
SEGMENT CROSSING POINT	51				
MISMATCHED ELEVATION	52				

ePCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
MAINLINE HORIZONTAL ALIGNMENT,					
PC, PT CELLS	1				
MAINLINE HORIZONTAL STATIONING					
TICKS & TEXT	2				
MAINLINE HORIZONTAL PC,					
PT LEADERS & TEXT	3				
MAINLINE HORIZONTAL BEARINGS	4				
MAINLINE HORIZONTAL CURVE DATA	5				
EDGE OF SHOULDER LINES	16	2	1	0	
PROFILE GRID (NOT USED)	17				
VERTICAL ALIGNMENT, PC, PT CELLS	20				
VERTICAL PROFILE ELEVATIONS	21				
VERTICAL STATIONS	22				
VERTICAL SIDE ELEVATIONS	23				
VERTICAL GRADES	24				
VERTICAL CURVE DATA	25				
EASEMENT SHADING	28				
EASEMENT NOTES	29				
DRAINAGE	30				
PERIMETER (WORK LIMITS)	32				
ENTRANCES	34				
SPECIAL DITCH TEXT	35				
SPECIAL DITCH CELLS & SYMBOLS	36				
PROFILE TITLE TEXT, BOX & AXIS	50				
PROFILE LEGEND TEXT & BOX	51				
PROFILE GRID	52				
	1			I	

prPCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	<b>PATTERN</b>
NOTE: All shapes - CO=10, LS=0, WT=1					
REMOVE CONCRETE CURB AND/OR GUTTER	46	2	20	3	
REMOVE ASPHALT CONCRETE PAVEMENT	49	12	0	1	Space=4',4' Angle=45,-45
REMOVE CONCRETE PAVEMENT	50	11	1	0	Space=4' Angle=45
REMOVE CONCRETE MEDIAN PAVEMENT	52	212			Area Fill
REMOVE CONCRETE DRIVEWAY PAVEMENT	53	5	1	0	Space=3',3' Angle=60,-60
REMOVE CONCRETE SIDEWALK	54	11			Area Fill

pPCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
TITLE BOX	1				
PIPE END TREATMENT	30	4	1	0	Varies
PIPE FLOWLINE & TOP	31	77	1	0	
PIPE TEXT	32	77	1	0	
PLOT SHAPE	45	2	0	7	
CROSS SECTION FIRST SURFACE - ORIGINAL	50				
CROSS SECTION SECOND SURFACE - SUBGRADE	51				
CROSS SECTION THIRD SURFACE - UNDERCUT	52				
CROSS SECTION FOURTH SURFACE - FINISH	53				
CROSS SECTION FIFTH SURFACE	54				
SHEET TITLE & AXIS-CROSS SECTION					
ANNOTATION	60				
CROSS SECTION GRID	62	0	0	1	

xPCN#.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
EXCAVATION SHAPE	20	4	1	0	
EXCAVATION SHADE - UNSTABLE MATERIAL		4	1	0	
EXCAVATION SHADE - MUCK	21	6	1	0	
EXCAVATION TEXT - UNSTABLE MATERIAL		4	1	0	
EXCAVATION TEXT - MUCK	22	6	1	0	
ANNOTATION CROSS SECTION - ELEV		4	2	0	
ANNOTATION CROSS SECTION - OFFSET	40	27	2	0	
PLOT SHAPE	45	2	0	7	
			Γ		
CROSS SECTION FIRST SURFACE - ORIGINAL	50	2	2	2	
CROSS SECTION SECOND SURFACE - SUBGRADE	51	3	2	0	
CROSS SECTION THIRD SURFACE - UNDERCUT	52	4	2	3	
CROSS SECTION FOURTH SURFACE - FINISH	53	6	2	0	
CROSS SECTION FIFTH SURFACE	54				
MASS HAUL DATA LINE	55	2	1	0	
MASS HAUL TITLE TEXT		4	0	0	
MASS HAUL AXIS	56	3	2	0	
MASS HAUL LABEL		77	0	0	
	_				
MASS HAUL GRID - HORIZONTAL		0	0	1	
MASS HAUL GRID - VERTICAL	58	0	0	1	
CROSS SECTION ADDITIONAL SURFACES	59				
AXIS ANNOTATION		3	2	0	
GRID STATION ANNOTATION	60	7	2	0	
CENTERLINE ELEV ANNOTATION		6	2	0	
CROSS SECTION GRID	62	0	0	1	

rPCN#.dgn	LEVELS	COLOR	WEIGHT	TEXT	CELLS
				R / U	
MAINLINE HORIZONTAL ALIGNMENT, PC, PT	1	6	5		
MAINLINE HORIZONTAL STATIONING					
TICKS & TEXT	2	6	2	18 / 3.6	
MAINLINE HORIZONTAL PC, PT LEADERS		_		10101	
& TEXT	3	6	0	18 / 3.6	
MAINLINE HORIZONTAL BEARINGS	4	6	2	18 / 3.6	
MAINLINE HORIZONTAL CURVE DATA	20	6	2	30 / 6	
CROSSROAD HORIZONTAL ALIGNMENT,	7	6	5		
PC, PT CELLS					
CROSSROAD STATIONING TICKS & TEXT	8	6	2		
CROSSROAD HORIZONTAL PC, PT					
LEADERS & TEXT	9	6	0		
CROSSROAD HORIZONTAL BEARING	10	6	2		
CROSSROAD HORIZONTAL CURVE DATA	11	6	2	30 / 5	
TEMPORARY EASEMENT HATCH AREA	13	3	0	LINE	STYLE = 1
RAILROAD TRACKS	14	50	1		
LINE TEXT FOR BEARINGS & DISTANCE				10101	
ALONG A LINE	15	50	0	18 / 3.6	
ASSUMED CORNERS	16	7	1	18 / 3.6	
FOUND CORNERS	17	3	1	18 / 3.6	
EXISTING POINTS	18	50	0	18 / 3.6	
PROPOSED POINTS	19	9	0	18 / 3.6	
LABELING SECTION – TOWNSHIP – RANGE	20	50	5	30/6	
STATIONING FOR SECTION LINE, ¼ LINE Etc.	20	6	2	18 / 3.6	
LABELING R.O.W. DIMENSION FOR PLANS,					
SECTION LINES, ¼ LINES, Etc. AND CITY LIMITS,	20	50	•	10/26	
RESERVATIONS, & GOV'T TAKE LINES CONTROL OF ACCESS	20	50 10	2	18 / 3.6	NEW / EXIST
COUNTY LINES	22	50	5	LINECT	YLE = COLN
SECTION LINES	23	50	4		YLE = SECLN
QUARTER LINES	24	50	3		YLE = QTLN
MEANDER LINES	25	5	2		$\frac{1LE - Q1LN}{STYLE = 4}$
EXISTING R.O.W.LINES (HIGHWAY R.O.W. BLOCK	23	3		LINE	STILE - 4
ADDITIONS & SUBDIVISON LINES)	25	50	0		
SIXTEENTH LINES	26	50	1		
NEW R.O.W. LINES (PROPOSED HIGHWAY R.O.W.					
LINES)	27	9	1		ı
NEW ACCESS EASEMENTS				LINE	STYLE = 3
PROPERTY LINES	28	50	2		
STATE LINES			5	LINE ST	YLE = STLN
CITY LIMITS	29	50	20	LINE	STYLE = 7
EXISTING ACCESS EASEMENTS			0	LINE	STYLE = 1
FOUND CORNER N&E COORDINATES	30	7	0	30	FCOR
LANDOWNER NAMES & LEGAL DESCRIPTION	33	50	2	18 / 3.6	
PROPOSED ROW (After Property Disposal)	37	188	4		STYLE = 3
PERMANENT ROW STATION OFFSET	38	10	2	18 / 3.6	
ROW Default Elements	51	39	5		
MISCELLANIOUS	59	Varies	Varies	Varies	
AREA NUMBERS	60	Varies	Varies	Varies	
ROW Main Points	62	6	2	18/ 3.6	
Area Shapes	63	6	3		

# <u>MISC.-LEVELS NEEDED ON FROM THE TPCN#S\*.DGN FILE TO ESTABLISH EXISTING RIGHT OF WAY</u> (7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 25, 29, 31, 35, 52 & 56)

STAp.dgn & STAe.dgn	LEVELS	COLOR	WEIGHT	TEXT	CELLS
				300 SCALE	
GEN. REPORT\NEW & EXIST AREA\LEGAL DESC. SHADING, X HATCHING	1	4 9	2 0	30	
BORDER \ CURVE DATA \ NEW & EXIST R.O.W. DIMENSIONS \ PROPERTY DESCRIPTION	20				
FOUND CORNER N&E CORNINATES	30	7	0	30/	FCOR
PLOT SHAPE	45	2	0	9	NAME
SHAPES	63		<u> </u>		<u>-</u>

tPCN#r.dgn	tPCN#s.dgn	tPCN#u.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
3	8 1	3			1		
AZIMUTH MARKE	ERS			6			AZIMKR
REFERENCE MAR	KS		1	0			REFMRK
TRIAGNULATION	STATIONS			6			TRISTA
BENCH MARKS			2	6			BNCHMK
RETAINING WALI	C		7	10	(	0	
RETAINING WALI	Lo		1	10	6	U	
EDGE OF OTHERS	1		9	47	0	0	
EDGE OF SHOULD	DERS			195	0	3	
CENTERLINES			10	28			
EDGE OF CONCRE	ETE			10	0	0	
EDGE OF ASPHAL	T		11	44	0	0	
CONCRETE SYMB	SOLS			10			CONC
APPROACHES \ EI	OGE OF GRAVEL		12	90	0	0	
CURB & GUTTER	\ CURB \ GUTTER		13	10	1	Varies	
RAILROADS			14	50	Varies	Varies	VARIES
SIDEWALKS			15	10	0	0	
ASSUMED CORNE	ERS		16	7			ACORN
FOUND CORNERS	1		17	3	1	0	BARCAP
BEARING TREE			17	3	1	0	BTREE
RAILROAD PROFI	LE		18	4	0	0	
BUSHES \ TREES			21	3	1	0	VARIES
DOSITES / TREES			21	3	<u>.</u>	U	VARIES
FENCE			25	19	0 \ 1	Varies	
GUARDRAIL			27	19	1	GRAIL	
ENVIRONMENTA	L SENSITIVE SITE		28	10	1	ESS	
DAM GRADES\DII			29	31	1	0	
DITCH BLOCKS				31	_	V	DTCHBK
	LES \ IRRIGATION	DITCHES	30	31	2	4\1	
LAKES EDGE				31	1	3	
CREEK EDGE \ RI'	VER EDGE		31	31	2	5 \ 7	
SPRING				31			SPRING
STREAM GAUGE				31			STMGAG
SLOUGHS OR MA	RSHES		32	31			SLOUGH
PIPES			33	31	1	Varies	
STORM SEWERS				25	1	STSEWR	VARIES
DOV CHI VEDTO	AND DDIDCEC		25	21	1	0	
BOX CULVERTS A WINGWALLS	AND DKIDGES		35	31 31	1 3	0	
WINOWALLS						l n	
UNDERGROUND I	ELECTRICAL UTILI	TIES	40	2	1	UNELEC	VARIES
UNDERGROUND	GAS UTILITIES		41	4	0 or 1	VARIES	VARIES
UNDERGROUND T	TELEPHONE UTILI	ΓIES	42	18	1	VARIES	VARIES
UNDERGROUND	WATER UTILITIES		43	31	1	UNWATR	VARIES
SANITARY SEWE	R		44	25	1	SANSEWR	VARIES
PUBLIC TELEPHO	NES		46	18	1	0	PUBTEL

tPCN#r.dgn	tPCN#s.dgn	tPCN#u.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
							_
TELEPHONE POLES				18	1	0	TELPOL
TELEVISION CAB	LE JCT. BOX		47	18	1	0	TVBOX
TELEVISION TOW	VER			18	0	0	TVTWER
MISC.MANHOLES	S		48	17	1	0	MISCMH
ABOVE GROUND	UTILITIES		49	2	1	0	POWERP
TRAFFIC SIGNAL	S		50	2	1	0	TRASIG
BUILDING			52	17	1	0 or 5	
GRAIN BINS				17			GRNBIN
MAILBOXES	MAILBOXES		53	17	1	0	MAILBX
BULK TANKS			54	4	1	0	BULKTK
GAS PUMP ISLAN	ID		54	4	0	GASISL	
UNDERGROUND	TANKS		54	4			UNTANK
SIGNS \ STREET N	MARKERS		55	17	0	0	STMRK
MISC. TOPOGRAPHY		56		Varies	Varies	Varies	
TRAFFIC SIGNS		57	3			Varies	
TEST WELLS \ BORE HOLES		60	4			TSTWLL	
SUBSURFACE UTILITY EXPLORATION TEST HOLE		60	0			TSTSUE	
DSCON LINES	DSCON LINES		62	0	0	0	
GROUND SHOTS		63	0				

STAw.dgn	STASTAw.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
DRAWING			5	1	0 or 1	Varies
TEXT		38	5	1	0	
PLOT SHAPE		45	2	0	7	NAME

STAc.dgn	STASTAl.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
EXISTING SIGNAL POLE	/ EXISTING	35	100	1	0	SPOLEX
CONTROLLER						CONTRX
LUMINAIRE / LUMINAIR	E POLE	36	0 or 2	1	0	Varies
MAST ARM		37	100	1	0	Varies
CONDUIT		38	101	4	0 or 1	Varies
TEXT			5	1	0	
SIGNAL POLE		39	100	1	0 or 1	SPOLE
MASKING CELLS		40	Varies	Varies	Varies	Varies
PEDESTRIAN / DETECTO	R LOOP		Varies	1	0 or 1	Varies
CONTROLLER / SERVICE	CABINET	41	26 or 100	1	0 or 1	Varies
JUNCTION BOX / EXISTIN	NG JUNCTION BOX	42	100	1	0 or 1	Varies
SECONDARY CONDUIT		43	101	4	0 or 1	Varies
SECONDARY JUNCTION	BOX	44	100	1	0 or 1	Varies
PLOT SHAPE		45	2	0	7	NAME

STApm.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
TDEXT	20		1		
TEXT	38	5	l I	U	
MASKING CELLS	40	Varies	Varies	Varies	Varies
PLOT SHAPE	45	2	0	7	NAME
TEOT SHIRE			ı v	,	THITTE
PAVEMENT MARKING LINES - INTERSTATE	54	8 or 20	4	0	Varies
PAVEMENT MARKING LINES	55	8 or 20	4	0	Varies

STAes.dgn	STAs.dgn	LEVELS	COLOR	WEIGHT	STYLE	CELLS
TEXT		38	5	1	Δ.	
ILAI		36	3	1	U	
MASKING CELLS		40	Varies	Varies	0 or 1	Varies
PLOT SHAPE		45	2	0	7	NAME